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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,485	12/11/2003	James Rulon Young Rawson	134164	1608
6147	7590	08/24/2006	EXAMINER	
GENERAL ELECTRIC COMPANY GLOBAL RESEARCH PATENT DOCKET RM. BLDG. K1-4A59 NISKAYUNA, NY 12309				FORTUNA, ANA M
		ART UNIT		PAPER NUMBER
		1723		

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT      PAPER

20060822

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Commissioner for Patents

Attached ther is a supplemental Examiner's amendment to paper of 7/11/06

Ana M Fortuna  
Primary Examiner  
Art Unit: 1723

**Supplemental**

**EXAMINER'S AMENDMENT**

**This amendment replaces the amendment attached to paper of 7/11/06.**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jason K. Klindtworth on 6/23/06.

The application has been amended as follows:

1. (Currently amended) A water softener comprising:

a cation exchange resin tank fluidly couple for discharging spent brine comprising monovalent and divalent ions;

a fluid mixer valve couple to the resin tank and to a water tank to dilute the spent brine to a desire concentration of a regenerant salt;

an ion-separation device fluidly couple to the fluid mixer valve to received the dilute spent brine and separate the diluted spent brine into first and second streams, the first stream substantially comprising monovalent inns and the second stream substantially comprising divalent ions; and

a reverse osmosis (RO) membrane fluidly couple to the ion-separation device to receive the first stream from the ion-separation device and produce a concentrate stream of monovalent ions and substantially demineralized water [to be collected];

wherein the concentrate stream of monovalent ions is collected for reuse as [the]  
regenerant salt.

3. (Currently amended) The water softener of claim 1 [wherein the regenerant  
salt from the RO membrane is collected in a brine storage tank for reuse for cation  
exchange resin regeneration] further comprising a tank for the collection of the  
regenerant salt, wherein the tank is connected to the cation exchange resin tank for  
regenerating said resin.

Cancel claims 9 and 15.

In claim 12, line 1; delete 9, and insert - -1- -; and in line 2, after "water",  
insert - - from said RO membrane- -.

This amendment corrects dependency of claim 12.

#### **Reasons for allowance**

2. The following is an examiner's statement of reasons for allowance: claims 1-6, 12-14, and 16-21 are allowed over the prior art of record. The combination of elements in the water softener apparatus and process steps of claim 17 and dependent claims as whole are not suggested in the prior art of record. The prior art teaches the separation monovalent and divalent ions from spent brine, however, combining the dilution and further concentration of monovalent ions to produce a regenerant salt stream, and recirculation back to the resin tank, is not disclosed or suggested in the prior art of record. Advantages to the dilution step, and further concentration of the monovalent salts are discussed in Applicant's remarks of 5/19/06.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana M. Fortuna whose telephone number is (571) 272-1141. The examiner can normally be reached on 9:30-6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Ana M Fortuna  
Primary Examiner  
Art Unit 1723

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June 23, 2006